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— *See* Watanabe, Frelinger, and Rutishauser.
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Fuchs, E. *See* Tyner and Fuchs.
Fuchs, R. *See* Roff, Fuchs, Mellman, and Robbins.
Fujimoto, T., and Singer, S. J. Immunocytochemical studies of endothelial cells in vivo. I. The presence of desmin only, or of desmin plus vimentin, or vimentin only, in the endothelial cells of different capillaries of the adult chicken. 2775.
Fujiwara, K. *See* Terasaki, Chen, and Fujiwara.
— *See* White and Fujiwara.
Fuller, S. D., and Simons, K. Transferrin receptor polarity and recycling accuracy in "tight" and "leaky" strains of Madin–Darby canine kidney cells. 1767.
Funderburg, F. M., and Markwald, R. R. Conditioning of native substrates by chondroitin sulfate proteoglycans during cardiac mesenchymal cell migration. 2475.
Furlong, S. T. *See* Golan, Brown, Cianci, Furlong, and Caulfield.
Furth, M. E. *See* Swanson, Elste, Greenberg, Schwartz, Aldrich, and Furth.
Furthmayr, H. *See* Charonis, Tsilibary, Saku, and Furthmayr.

G

Gabbiani, G. *See* Skalli, Ropraz, Trzeciak, Benzonana, Gillessen, and Gabbiani.
Gabel, C. A., and Foster, S. A. Mannose 6-phosphate receptor–mediated endocytosis of acid hydrolases: internalization of β-glucuronidase is accompanied by a limited dephosphorylation. 1817.
Gajdusek, C., Carbon, S., Ross, R., Nawroth, P., and Stern, D. Activation of coagulation releases endothelial cell mitogens. 419.
Gall, J. G. *See* Berg and Gall.
— *See* Epstein, Mahon, and Gall.
Gallin, J. I. *See* Rotrosen and Gallin.
Galvin, S. *See* Schermer, Galvin, and Sun.
Garland, P. B. *See* Foley, MacGregor, Kusel, Garland, Downie, and Moore.
Garoff, H. *See* Roman and Garoff.
Garrigues, H. J., Lark, M. W., Lara, S., Hellström, I., Hellström, K. E., and Wight, T. N. The melanoma proteoglycan: restricted expression on microspikes, a specific microdomain of the cell surface. 1699.
Gatmaitan, Z. *See* Spray, Ginzberg, Morales, Gatmaitan, and Arias.
Gebhart, B. *See* Goodenough, Gebhart, Mecham, and Heuser.
Geiger, B. *See* Volk and Geiger.
Gerace, L. *See* Suprynowicz and Gerace.
Gerisch, G. *See* Pagh and Gerisch.
Gething, M.-J. *See* Doyle, Sambrook, and Gething.
Geuens, G., Gundersen, G. G., Nuydens, R., Cornelissen, F., Bulinski, J. C., and DeBrabander, M. Ultrastructural colocalization of tyrosinated and detyrosinated α-tubulin in interphase and mitotic cells. 1883.
Giancotti, F. G., Comoglio, P. M., and Tarone, G. Fibronectin–plasma membrane interaction in the adhesion of hemopoietic cells. 429.
Gibney, E. *See* Linsenmayer, Gibney, and Fitch.
Gilbert, S. P., and Sloboda, R. D. Identification of a MAP 2-like ATP-binding protein associated with axoplasmic vesicles that translocate on isolated microtubules. 947.
Gilchrest, B. A. *See* Yaar, Palleroni, and Gilchrest.
Gillessen, D. *See* Skalli, Ropraz, Trzeciak, Benzonana, Gillessen, and Gabbiani.
Gilmore, R. *See* Connolly and Gilmore.
Gilula, N. B. *See* Kumar and Gilula.
Gimbrone, M. A., Jr. *See* Muller and Gimbrone.
Ginzberg, R. D. *See* Spray, Ginzberg, Morales, Gatmaitan, and Arias.
Glaser, L. *See* Cole, Loewy, Cross, Akeson, and Glaser.
— *See* Ratner, Elbein, Bunge, Porter, Bunge, and Glaser.
— *See* Whitely and Glaser.
Glätzer, K. H., and Kloetzel, P.-M. Differential chromosomal distribution of ribonucleoprotein antigens in nuclei of *Drosophila* spermatocytes. 2113.
Golan, D. E., Brown, C. S., Cianci, C. M. L., Furlong, S. T., and Caulfield, J. P. Schistosomula of *Schistosoma mansoni* use lysophosphatidylcholine to lyse adherent human red blood cells and immobilize red cell components. 819.
Goldberg, D. J., and Burmeister, D. W. Stages in axon formation: observations of growth of *Aplysia* axons in culture using video-enhanced contrast-differential interference contrast microscopy. 1921.
Gomer, R. H., Datta, S., and Firtel, R. A. Cellular and subcellular distribution of a cAMP-regulated prestalk protein and prespore protein in *Dictyostelium discoideum*: a study on the ontogeny of prestalk and prespore cells. 1999.
Gonnella, P. *See* Siminoski, Gonnella, Bernanke, Owen, Neutra, and Murphy.
Goodenough, D. A. *See* Stevenson, Siliciano, Mooseker, and Goodenough.
Goodenough, U. W., Gebhart, B., Mecham, R. P., and Heuser, J. E. Crystals of the *Chlamydomonas reinhardtii* cell wall: polymerization, depolymerization, and purification of glycoprotein monomers. 405.
Goodhouse, J. *See* Brown, Goodhouse, and Farquhar.
Gorden, P. *See* Iacopetta, Carpentier, Pozzan, Lew, Gorden, and Orci.
Gounon, P. *See* Moreau, Angelier, Bonnanfant-Jais, Gounon, and Kubisz.
Green, S. H. *See* Greene, Drexler, Connolly, Rukenstein, and Green.
Greenberg, S. M. *See* Swanson, Elste, Greenberg, Schwartz, Aldrich, and Furth.
Greenberger, L. M., and Pfenninger, K. H. Membrane glycoproteins of the nerve growth cone: diversity and growth regulation of oligosaccharides. 1369.
Greene, L. A., Drexler, S. A., Connolly, J. L., Rukenstein, A., and Green, S. H. Selective inhibition of responses to nerve growth factor and of microtubule-associated protein phosphorylation by activators of adenylate cyclase. 1967.
— *See* Black, Aletta, and Greene.
Greengard, P. *See* Navone, Jahn, Di Gioia, Stukenbrok, Greengard, and De Camilli.
Greer, K. *See* Maruta, Greer, and Rosenbaum.
Grinnell, F. Focal adhesion sites and the removal of substratum-bound fibronectin. 2697.
Gross, J. *See* Bruns, Press, Engvall, Timpl, and Gross.
Grumet, M. *See* Daniloff, Levi, Grumet, Rieger, and Edelman.
— *See* Hoffman, Friedlander, Chuong, Grumet, and Edelman.
— *See* Rieger, Daniloff, Pincon-Raymond, Crossin, Grumet, and Edelman.

Grund, C. *See* Franke, Grund, and Achtstätter.
Gundersen, G. G. *See* Geuens, Gundersen, Nuydens, Cornelissen, Bulinski, and DeBrabander.
Gurofsky, S. *See* Ball, Freitag, and Gurofsky.

H

Hagen, S. J., Kiehart, D. P., Kaiser, D. A., and Pollard, T. D. Characterization of monoclonal antibodies to *Acanthamoeba* myosin-I that cross-react with both myosin-II and low molecular mass nuclear proteins. 2121.
Haimo, L. T. *See* Rozdzial and Haimo.
Halegoua, S. *See* Cremins, Wagner, and Halegoua.
Hall, M. O. *See* Mayerson and Hall.
Hamkalo, B. A. *See* Lica, Narayanswami, and Hamkalo.
Hannink, M., and Donoghue, D. J. Cell surface expression of membrane-anchored v-*sis* gene products: glycosylation is not required for cell surface transport. 2311.
Hantaï, D. *See* Festoff, Hantaï, Soria, Thomaïdis, and Soria.
Hardwick, J. M., Shaw, K. E. S., Wills, J. W., and Hunter, E. Amino-terminal deletion mutants of the Rous sarcoma virus glycoprotein do not block signal peptide cleavage but can block intracellular transport. 829.
Hardy, C. *See* Lynch, O'Guin, Hardy, Mak, and Sun.
Harlan, J. M., Thompson, P. J., Ross, R. R., and Bowen-Pope, D. F. α-Thrombin induces release of platelet-derived growth factor–like molecule(s) by cultured human endothelial cells. 1129.
Hart, G. W. *See* Bangs, Andrews, Hart, and Englund.
Hartwig, J. H., and Shevlin, P. The architecture of actin filaments and the ultrastructural location of actin-binding protein in the periphery of lung macrophages. 1007.
Hasegawa, T. *See* Chen, Wang, Hasegawa, Yamada, and Yamada.
Hatzfeld, M. *See* Knapp, Franke, Heid, Hatzfeld, Jorcano, and Moll.
Haylett, T., and Thilo, L. Limited and selected transfer of plasma membrane glycoproteins to membrane of secondary lysosomes. 1249.
Heck, M. M. S., and Earnshaw, W. C. Topoisomerase II: a specific marker for cell proliferation. 2569.
Heid, H. *See* Knapp, Franke, Heid, Hatzfeld, Jorcano, and Moll.
Heidemann, S. R. *See* Baas and Heidemann.
Helenius, A. *See* Copeland, Doms, Bolzau, Webster, and Helenius.
Hellström, I. *See* Garrigues, Lark, Lara, Hellström, Hellström, and Wight.
Hellström, K. E. *See* Garrigues, Lark, Lara, Hellström, Hellström, and Wight.
Henson, J. H. *See* Enders, Henson, and Millette.
Herrin, D. L., Michaels, A. S., and Paul, A.-L. Regulation of genes encoding the large subunit of ribulose-1,5-bisphosphate carboxylase and the photosystem II polypeptides D-1 and D-2 during the cell cycle of *Chlamydomonas reinhardtii*. 1837.
— *See* Jensen, Herrin, Plumley, and Schmidt.
Heuser, J. E. Different structural states of a microtubule cross-linking molecule, captured by quick-freezing motile axostyles in protozoa. 2209.
— *See* Goodenough, Gebhart, Mecham, and Heuser.
Hidaka, H. *See* Tash, Hidaka, and Means.
Hill, C. S., Duran, S., Lin, Z., Weber, K., and Holtzer, H. Titin and myosin, but not desmin, are linked during myofibrillogenesis in postmitotic mononucleated myoblasts. 2185.
Hill, D. F. *See* Kedersha, Hill, Kronquist, and Rome.
Hirokawa, N. 270K microtubule-associated protein cross-reacting with anti–MAP2 IgG in the crayfish peripheral nerve axon. 33.
— *See* Murofushi, Kotani, Aizawa, Hisanaga, Hirokawa, and Sakai.
Hisanaga, S. *See* Murofushi, Kotani, Aizawa, Hisanaga, Hirokawa, and Sakai.
Ho, S.-C., Malek-Hedayat, S., Wang, J. L., and Schindler, M. Endogenous lectins from cultured soybean cells: isolation of a protein immunologically cross-reactive with seed soybean agglutinin and analysis of its role in binding of *Rhizobium japonicum*. 1043.
Hoffman, S., Friedlander, D. R., Chuong, C.-M., Grumet, M., and Edelman, G. M. Differential contributions of Ng-CAM and N-CAM to cell adhesion in different neural regions. 145.
Hollenbeck, P. J., and Chapman, K. A novel microtubule-associated protein from mammalian nerve shows ATP-sensitive binding to microtubules. 1539.
Holtzer, H. *See* Hill, Duran, Lin, Weber, and Holtzer.
Honig, M. G., and Hume, R. I. Fluorescent carbocyanine dyes allow living neurons of identified origin to be studied in long-term cultures. 171.
Hortsch, M., Avossa, D., and Meyer, D. I. Characterization of secretory protein translocation: ribosome–membrane interaction in endoplasmic reticulum. 241.
Horwitz, A. F. *See* Buck, Shea, Duggan, and Horwitz.
Howard, R. J., Uni, S., Aikawa, M., Aley, S. B., Leech, J. H., Lew, A. M., Wellems, T. E., Rener, J., and Taylor, D. W. Secretion of a malarial histidine-rich protein (Pf HRP II) from *Plasmodium falciparum*–infected erythrocytes. 1269.
Howlett, A. R. *See* Carter, Howlett, Martin, and Bissell.
Hu, J. S. *See* Olson, Sternberg, Hu, Spizz, and Wilcox.
Huima, T. *See* Pfeffer, Huima, and Redman.
Hume, R. I. *See* Honig and Hume.
Humphries, M. J., Akiyama, S. K., Komoriya, A., Olden, K., and Yamada, K. M. Identification of an alternatively spliced site in human plasma fibronectin that mediates cell type–specific adhesion. 2637.
Hunnicutt, G. *See* Snell, Kosfiszer, Clausell, Perillo, Imam, and Hunnicutt.
Hunt, T. *See* Standart, Hunt, and Ruderman.
Hunter, E. *See* Hardwick, Shaw, Wills, and Hunter.
Hynes, R. O. *See* Lawler and Hynes.

I

Iacopetta, B., Carpentier, J.-L., Pozzan, T., Lew, D. P., Gorden, P., and Orci, L. Role of intracellular calcium and protein kinase C in the endocytosis of transferrin and insulin by HL60 cells. 851.
Imam, S. *See* Snell, Kosfiszer, Clausell, Perillo, Imam, and Hunnicutt.
Imhof, B. A. *See* Savagner, Imhof, Yamada, and Thiery.
Infusini, E. *See* Castellani, Siri, Rosellini, Infusini, Borsi, and Zardi.
Iwata, H. *See* Takeda, Iwata, Suzuki, Brown, and Kimata.

J

Jacob, J. S., and Miller, K. R. The effects of galactolipid depletion on the structure of a photosynthetic membrane. 1337.
Jacob, M. H., Lindstrom, J. M., and Berg, D. K. Surface and intracellular distribution of a putative neuronal nicotinic acetylcholine receptor. 205.
Jacobs, J. R., and Stevens, J. K. Changes in the organization of the neuritic cytoskeleton during nerve growth factor–activated differentiation of PC12 cells: a serial electron microscopic study of the development and control of neurite shape. 895.
—, **and Stevens, J. K.** Experimental modification of PC12 neurite shape with the microtubule-depolymerizing drug nocodazole: a serial electron microscopic study of neurite shape control. 907.
Jahn, R. *See* Navone, Jahn, Di Gioia, Stukenbrok, Greengard, and De Camilli.
Jalkanen, M. *See* Rapraeger, Jalkanen, and Bernfield.
Jamieson, J. D. *See* Chang and Jamieson.
Janmey, P. A. *See* Chaponnier, Janmey, and Yin.
Jenkison, M. *See* Ecob-Prince, Jenkison, Butler-Browne, and Whalen.
Jensen, C. G., and Smaill, B. H. Analysis of the spatial organization of microtubule-associated proteins. 559.
Jensen, K. H., Herrin, D. L., Plumley, F. G., and Schmidt, G. W. Biogenesis of photosystem II complexes: transcriptional, translational, and posttranslational regulation. 1315.
Jensen, L. C. W. *See* Rieder, Davison, Jensen, Cassimeris, and Salmon.
Jochen, A. L., and Berhanu, P. Chymotrypsin substrate analogues inhibit endocytosis of insulin and insulin receptors in adipocytes. 1807.

John, N. J. *See* Firestone, John, and Yamamoto.
Johnson, C. S. *See* McKenna, Johnson, and Wang.
Jones, G. E., Arumugham, R. G., and Tanzer, M. L. Fibronectin glycosylation modulates fibroblast adhesion and spreading. 1663.
Jorcano, J. L. *See* Knapp, Franke, Heid, Hatzfeld, Jorcano, and Moll.
Juliano, R. L. *See* Brown and Juliano.
Jungfer, H. *See* Abken, Jungfer, Albert, and Willecke.

K

Kagan, H. M., Vaccaro, C. A., Bronson, R. E., Tang, S.-S., and Brody, J. S. Ultrastructural immunolocalization of lysyl oxidase in vascular connective tissue. 1121.
Kaiser, D. A. *See* Hagen, Kiehart, Kaiser, and Pollard.
Kalomiris, E. L. *See* Bourguignon, Suchard, and Kalomiris.
Kam, Z. *See* Livneh, Benveniste, Prywes, Felder, Kam, and Schlessinger.
Kamel, S. *See* Kennedy, Kamel, Tambone, Vrbova, and Zak.
Kamiya, R. *See* Okagaki and Kamiya.
Kawai, Y. *See* Newman, Kawai, Montgomery, and Kunicki.
Kawamoto, R. M., Brunschwig, J.-P., Kim, K. C., and Caswell, A. H. Isolation, characterization, and localization of the spanning protein from skeletal muscle triads. 1405.
Kedersha, N. L., and Rome, L. H. Isolation and characterization of a novel ribonucleoprotein particle: large structures contain a single species of small RNA. 699.
—, Hill, D. F., Kronquist, K. E., and Rome, L. H. Subpopulations of liver coated vesicles resolved by preparative agarose gel electrophoresis. 287.
Keene, D. R. *See* Sakai, Keene, Morris, and Burgeson.
— *See* Sakai, Keene, and Engvall.
Keller, G. A., Pazirandeh, M., and Krisans, S. 3-Hydroxy-3-methylglutaryl coenzyme A reductase localization in rat liver perixosomes and microsomes of control and cholestyramine-treated animals: quantitative biochemical and immunoelectron microscopical analyses. 875.
Kelly, R. B. *See* Carlson, Caroni, and Kelly.
Kennedy, J. M., Kamel, S., Tambone, W. W., Vrbova, G., and Zak, R. The expression of myosin heavy chain isoforms in normal and hypertrophied chicken slow muscle. 977.
Kersken, H. *See* Vilmart-Seuwen, Kersken, Stürzl, and Plattner.
Keski-Oja, J. *See* Laiho, Saksela, Andreasen, and Keski-Oja.
Kiehart, D. P., and Feghali, R. Cytoplasmic myosin from *Drosophila melanogaster*. 1517.
— *See* Hagen, Kiehart, Kaiser, and Pollard.
Kim, K. C. *See* Kawamoto, Brunschwig, Kim, and Caswell.
Kim, K. S. *See* Resendez, Ting, Kim, Wooden, and Lee.
Kimata, K. *See* Takeda, Iwata, Suzuki, Brown, and Kimata.
Kirschner, M. W. *See* Drubin and Kirschner.
Kloetzel, P.-M. *See* Glätzer and Kloetzel.
Klotz, C., Bordes, N., Laine, M.-C., Sandoz, D., and Bornens, M. Myosin at the apical pole of ciliated epithelial cells as revealed by a monoclonal antibody. 613.
Kmiec, E. B., and Worcel, A. The positive transcription factor of the 5S RNA gene proteolyses during direct exchange between 5S DNA sites. 673.
Knapp, A. C., Franke, W. W., Heid, H., Hatzfeld, M., Jorcano, J. L., and Moll, R. Cytokeratin No. 9, an epidermal type I keratin characteristic of a special program of keratinocyte differentiation displaying body site specificity. 657.
Knapp, B. *See* Rentrop, Knapp, Winter, and Schweizer.
Knodel, S. *See* Meda, Bruzzone, Knodel, and Orci.
Kobayashi, T. *See* Martinuzzi, Askanas, Kobayashi, Engel, and Di Mauro.
Komoriya, A. *See* Humphries, Akiyama, Komoriya, Olden, and Yamada.
Koonce, M. P., and Schliwa, M. Reactivation of organelle movements along the cytoskeletal framework of a giant freshwater ameba. 605.
Korn, E. D. *See* Ueno and Korn.
Kosfiszer, M. G. *See* Snell, Kosfiszer, Clausell, Perillo, Imam, and Hunnicutt.
Kotani, S. *See* Murofushi, Kotani, Aizawa, Hisanaga, Hirokawa, and Sakai.
Krahenbuhl, J. L. *See* Sibley, Krahenbuhl, Adams, and Weidner.
Kreis, T. E. *See* Allan and Kreis.
Krisans, S. *See* Keller, Pazirandeh, and Krisans.
Krohne, G. *See* Benavente and Krohne.
Kronquist, K. E. *See* Kedersha, Hill, Kronquist, and Rome.
Krotski, D. M., Domingo, C., and Bronner-Fraser, M. Distribution of a putative cell surface receptor for fibronectin and laminin in the avian embryo. 1061.
Kubisz, P. *See* Moreau, Angelier, Bonnanfant-Jais, Gounon, and Kubisz.
Kuehl, L. *See* Wu, Kuehl, and Rechsteiner.
Kumar, N. M., and Gilula, N. B. Cloning and characterization of human and rat liver cDNAs coding for a gap junction protein. 767.
Kunicki, T. J. *See* Newman, Kawai, Montgomery, and Kunicki.
Kuo, T. *See* Teeter, Atsumi, Sen, and Kuo.
Kurkinen, M. *See* Blumberg, Fessler, Kurkinen, and Fessler.
Kusel, J. R. *See* Foley, MacGregor, Kusel, Garland, Downie, and Moore.

L

Labrecque, A. D. *See* Madsen, Larsson, Rehfeld, Schwartz, Lernmark, Labrecque, and Steiner.
Lachman, L. B. *See* Darlington, Wilson, and Lachman.
Laiho, M., Saksela, O., Andreasen, P. A., and Keski-Oja, J. Enhanced production and extracellular deposition of the endothelial-type plasminogen activator inhibitor in cultured human lung fibroblasts by transforming growth factor-β. 2403.
Laine, M.-C. *See* Klotz, Bordes, Laine, Sandoz, and Bornens.
Lara, S. *See* Garrigues, Lark, Lara, Hellström, Hellström, and Wight.
Lark, M. W. *See* Garrigues, Lark, Lara, Hellström, Hellström, and Wight.
Larkin, J. M., Donzell, W. C., and Anderson, R. G. W. Potassium-dependent assembly of coated pits: new coated pits form as planar clathrin lattices. 2619.
Larsson, L.-I. *See* Madsen, Larsson, Rehfeld, Schwartz, Lernmark, Labrecque, and Steiner.
Last, R. L., and Woolford, J. L., Jr. Identification and nuclear localization of yeast pre-messenger RNA processing components: *RNA2* and *RNA3* proteins. 2103.
Lauffer, L. *See* Tajima, Lauffer, Rath, and Walter.
Lawler, J., and Hynes, R. O. The structure of human thrombospondin, an adhesive glycoprotein with multiple calcium-binding sites and homologies with several different proteins. 1635.
Lazarides, E. *See* Woods, Boyer, Vogt, and Lazarides.
LeDizet, M., and Piperno, G. Cytoplasmic microtubules containing acetylated α-tubulin in *Chlamydomonas reinhardtii*: spatial arrangement and properties. 13.
Lee, A. S. *See* Resendez, Ting, Kim, Wooden, and Lee.
Leech, J. H. *See* Howard, Uni, Aikawa, Aley, Leech, Lew, Wellems, Rener, and Taylor.
Legrès, L. G. *See* Poliard, Bernuau, Tournier, Legrès, Schoevaert, Feldmann, and Sala-Trepat.
Leivo, I., and Engvall, E. C3d fragment of complement interacts with laminin and binds to basement membranes of glomerulus and trophoblast. 1091.
Lenglachner-Bachinger, C. *See* Flucher, Lenglachner-Bachinger, Pohlhammer, Adam, and Mollay.
Lernmark, A. *See* Madsen, Larsson, Rehfeld, Schwartz, Lernmark, Labrecque, and Steiner.
Leser, G. *See* Fakan, Leser, and Martin.
Levi, G. *See* Daniloff, Levi, Grumet, Rieger, and Edelman.
Levitt-Gilmour, T. *See* Salpeter, Cooper, and Levitt-Gilmour.
Lew, A. M. *See* Howard, Uni, Aikawa, Aley, Leech, Lew, Wellems, Rener, and Taylor.
Lew, D. P. *See* Iacopetta, Carpentier, Pozzan, Lew, Gorden, and Orci.
Lewis, S. A. *See* Wang, Villasante, Lewis, and Cowan.
Lica, L. M., Narayanswami, S., and Hamkalo, B. A. Mouse satellite DNA, centromere structure, and sister chromatid pairing. 1145.

Lin, H.-P. P. *See* Church, Nicklas, and Lin.
Lin, J. J.-C., and Lin, J. L.-C. Assembly of different isoforms of actin and tropomyosin into the skeletal tropomyosin-enriched microfilaments during differentiation of muscle cells in vitro. 2173.
Lin, J. L.-C. *See* Lin and Lin.
Lin, S. *See* Wilkins, Risinger, and Lin.
Lin, Z. *See* Hill, Duran, Lin, Weber, and Holtzer.
Lindstrom, J. M. *See* Jacob, Lindstrom, and Berg.
Linnemans, W. A. M. *See* Wiegant, Blok, Defize, Linnemans, Verkley, and Boonstra.
Linsenmayer, T. F., Gibney, E., and Fitch, J. M. Embryonic avian cornea contains layers of collagen with greater than average stability. 1587.
Livneh, E., Benveniste, M., Prywes, R., Felder, S., Kam, Z., and Schlessinger, J. Large deletions in the cytoplasmic kinase domain of the epidermal growth factor receptor do not affect its lateral mobility. 327.
Loewy, A. *See* Cole, Loewy, Cross, Akeson, and Glaser.
Lohmann, S. M. *See* De Camilli, Moretti, Donini, Walter, and Lohmann.
Lottspeich, F. *See* Witke, Schleicher, Lottspeich, and Noegel.
Lunazzi, G. C. *See* de Bernard, Bianco, Bonucci, Costantini, Lunazzi, Martinuzzi, Modricky, Moro, Panfili, Pollesello, Stagni, and Vittur.
Lynch, M. H., O'Guin, W. M., Hardy, C., Mak, L., and Sun, T.-T. Acidic and basic hair/nail ("hard") keratins: their colocalization in upper cortical and cuticle cells of the human hair follicle and their relationship to "soft" keratins. 2593.

M

Ma, A. S.-P., and Sun, T.-T. Differentiation-dependent changes in the solubility of a 195-kD protein in human epidermal keratinocytes. 41.
MacGregor, A. N. *See* Foley, MacGregor, Kusel, Garland, Downie, and Moore.
Mackinnon, L. A. T. *See* Epstein, Ortiz, and Mackinnon.
Madsen, O. D., Larsson, L.-I., Rehfeld, J. F., Schwartz, T. W., Lernmark, A., Labrecque, A. D., and Steiner, D. F. Cloned cell lines from a transplantable islet cell tumor are heterogeneous and express cholecystokinin in addition to islet hormones. 2025.
Madsen, O. *See* Orci, Ravazzola, Amherdt, Madsen, Perrelet, Vassalli, and Anderson.
Madsen, P., Nielsen, S., and Celis, J. E. Monoclonal antibody specific for human nuclear proteins IEF 8Z30 and 8Z31 accumulates in the nucleus a few hours after cytoplasmic microinjection of cells expressing these proteins. 2083.
Magnani, J. L. *See* Rougon, Dubois, Buckley, Magnani, and Zollinger.
Mahon, K. A. *See* Epstein, Mahon, and Gall.
Maisel, H. *See* Aster, Brewer, and Maisel.
Mak, L. *See* Lynch, O'Guin, Hardy, Mak, and Sun.
Malek-Hedayat, S. *See* Ho, Malek-Hedayat, Wang, and Schindler.
Manthorpe, M. *See* Engvall, Davis, Dickerson, Ruoslahti, Varon, and Manthorpe.
Markwald, R. R. *See* Funderburg and Markwald.
Martin, G. S. *See* Carter, Howlett, Martin, and Bissell.
Martin, T. E. *See* Fakan, Leser, and Martin.
Martini, R., and Schachner, M. Immunoelectron microscopic localization of neural cell adhesion molecules (L1, N-CAM, and MAG) and their shared carbohydrate epitope and myelin basic protein in developing sciatic nerve. 2439.
Martinuzzi, A., Askanas, V., Kobayashi, T., Engel, W. K., and Di Mauro, S. Expression of muscle-gene–specific isozymes of phosphorylase and creatine kinase in innervated cultured human muscle. 1423.
Martinuzzi, P. *See* de Bernard, Bianco, Bonucci, Costantini, Lunazzi, Martinuzzi, Modricky, Moro, Panfili, Pollesello, Stagni, and Vittur.
Maruta, H., Greer, K., and Rosenbaum, J. L. The acetylation of alpha-tubulin and its relationship to the assembly and disassembly of microtubules. 571.
Matlin, K. S. The sorting of proteins to the plasma membrane in epithelial cells. 2565.
Matsumura, F. *See* Yamashiro-Matsumara and Matsumura.
Matthew, W. D. *See* Chiu, Matthew, and Patterson.
Matthieu, J.-M., Roch, J.-M., Omlin, F. X., Rambaldi, I., Almazan, G., and Braun, P. E. Myelin instability and oligodendrocyte metabolism in myelin-deficient mutant mice. 2673.
Maurer, A. *See* Costello, Chadwick, Saito, Chu, Maurer, and Fleischer.
Mayerson, P. L., and Hall, M. O. Rat retinal pigment epithelial cells show specificity of phagocytosis in vitro. 299.
McClelland, A. *See* Miskimins, McClelland, Roberts, and Ruddle.
McCurdy, D. W., and Pratt, L. H. Immunogold electron microscopy of phytochrome in *Avena*: identification of intracellular sites responsible for phytochrome sequestering and enhanced pelletability. 2541.
McDonald, K. *See* Cande and McDonald.
McKenna, N. M., Johnson, C. S., and Wang, Y.-L. Formation and alignment of Z lines in living chick myotubes microinjected with rhodamine-labeled alpha-actinin. 2163.
McNiven, M. A., and Porter, K. R. Microtubule polarity confers direction to pigment transport in chromatophores. 1547.
Means, A. R. *See* Tash, Hidaka, and Means.
Mecham, R. P. *See* Goodenough, Gebhart, Mecham, and Heuser.
Meda, P., Bruzzone, R., Knodel, S., and Orci, L. Blockage of cell-to-cell communication within pancreatic acini is associated with increased basal release of amylase. 475.
Mellman, I. *See* Roff, Fuchs, Mellman, and Robbins.
Mescher, M. F. *See* Apgar and Mescher.
Meyer, D. I. *See* Hortsch, Avossa, and Meyer.
Michaels, A. S. *See* Herrin, Michaels, and Paul.
Miles, L. A. *See* Plow, Freaney, Plescia, and Miles.
Milks, L. C., Conyers, G. P., and Cramer, E. B. The effect of neutrophil migration on epithelial permeability. 2729.
Miller, F. J. *See* Sluder, Miller, and Rieder.
Miller, J. B., and Stockdale, F. E. Developmental regulation of the multiple myogenic cell lineages of the avian embryo. 2197.
Miller, K. R. *See* Jacob and Miller.
Millette, C. F. *See* Enders, Henson, and Millette.
— *See* Wolf, Scott, and Millette.
Miskimins, W. K., McClelland, A., Roberts, M. P., and Ruddle, F. H. Cell proliferation and expression of the transferrin receptor gene: promoter sequence homologies and protein interactions. 1781.
Mitchell, D. R. *See* Williams, Mitchell, and Rosenbaum.
Miyatani, S., Winkles, J. A., Sargent, T. D., and Dawid, I. B. Stage-specific keratins in *Xenopus laevis* embryos and tadpoles: the XK81 gene family. 1957.
Modricky, C. *See* de Bernard, Bianco, Bonucci, Costantini, Lunazzi, Martinuzzi, Modricky, Moro, Panfili, Pollesello, Stagni, and Vittur.
Mohandas, N. *See* Chasis and Mohandas.
Moll, R. *See* Knapp, Franke, Heid, Hatzfeld, Jorcano, and Moll.
Mollay, C. *See* Flucher, Lenglachner-Bachinger, Pohlhammer, Adam, and Mollay.
Montgomery, R. R. *See* Newman, Kawai, Montgomery, and Kunicki.
Moore, I. *See* Foley, MacGregor, Kusel, Garland, Downie, and Moore.
Mooseker, M. S. *See* Stevenson, Siliciano, Mooseker, and Goodenough.
Morales, E. A. *See* Spray, Ginzberg, Morales, Gatmaitan, and Arias.
Moreau, N., Angelier, N., Bonnanfant-Jais, M.-L., Gounon, P., and Kubisz, P. Association of nucleoplasmin with transcription products as revealed by immunolocalization in the amphibian oocyte. 683.
Moretti, M. *See* De Camilli, Moretti, Donini, Walter, and Lohmann.
Moro, L. *See* de Bernard, Bianco, Bonucci, Costantini, Lunazzi, Martinuzzi, Modricky, Moro, Panfili, Pollesello, Stagni, and Vittur.
Morris, N. P. *See* Sakai, Keene, Morris, and Burgeson.
Moy, G. W. *See* Ward, Moy, and Vacquier.
Mueller, S. C. *See* Chen, Chen, and Mueller.
Muller, W. A., and Gimbrone, M. A., Jr. Plasmalemmal proteins of cultured vascular endothelial cells exhibit apical–basal polarity: analysis by surface-selective iodination. 2389.
Murofushi, H., Kotani, S., Aizawa, H., Hisanaga, S., Hirokawa, N., and Sakai, H. Purification and characterization of a 190-kD microtubule-associated protein from bovine adrenal cortex. 1911.

Murphy, R. A. *See* Siminoski, Gonnella, Bernanke, Owen, Neutra, and Murphy.
Murray, B. A., Owens, G. C., Prediger, E. A., Crossin, K. L., Cunningham, B. A., and Edelman, G. M. Cell surface modulation of the neural cell adhesion molecule resulting from alternative mRNA splicing in a tissue-specific developmental sequence. 1431.
Murthy, U., Basu, M., Sen-Majumdar, A., and Das, M. Perinuclear location and recycling of epidermal growth factor receptor kinase: immunofluorescent visualization using antibodies directed to kinase and extracellular domains. 333.
Myles, D. G. *See* Cowan, Primakoff, and Myles.

N

Nagata, K., Saga, S., and Yamada, K. M. A major collagen-binding protein of chick embryo fibroblasts is a novel heat shock protein. 223.
Narayanswami, S. *See* Lica, Narayanswami, and Hamkalo.
Navone, F., Jahn, R., Di Gioia, G., Stukenbrok, H., Greengard, P., and De Camilli, P. Protein p38: an integral membrane protein specific for small vesicles of neurons and neuroendocrine cells. 2511.
Nawroth, P. *See* Gajdusek, Carbon, Ross, Nawroth, and Stern.
Nelson, W. J., and Veshnock, P. J. Dynamics of membrane–skeleton (fodrin) organization during development of polarity in Madin–Darby canine kidney epithelial cells. 1751.
Neutra, M. *See* Siminoski, Gonnella, Bernanke, Owen, Neutra, and Murphy.
Newman, P. J., Kawai, Y., Montgomery, R. R., and Kunicki, T. J. Synthesis by cultured human umbilical vein endothelial cells of two proteins structurally and immunologically related to platelet membrane glycoproteins IIb and IIIa. 81.
Newmeyer, D. D., Finlay, D. R., and Forbes, D. J. In vitro transport of a fluorescent nuclear protein and exclusion of non-nuclear proteins. 2091.
Nicklas, R. B. *See* Church, Nicklas, and Lin.
Nielsen, S. *See* Madsen, Nielsen, and Celis.
Noe, B. D., Andrews, P. C., Dixon, J. E., and Spiess, J. Cotranslational and posttranslational proteolytic processing of preprosomatostatin-I in intact islet tissue. 1205.
Noegel, A. *See* Witke, Schleicher, Lottspeich, and Noegel.
Nose, A., and Takeichi, M. A novel cadherin cell adhesion molecule: its expression patterns associated with implantation and organogenesis of mouse embryos. 2649.
Nuydens, R. *See* Geuens, Gundersen, Nuydens, Cornelissen, Bulinski, and DeBrabander.

O

Oesch, F. *See* Wieser and Oesch.
O'Guin, W. M. *See* Lynch, O'Guin, Hardy, Mak, and Sun.
Ohad, I. *See* Schuster, Dewit, Staehelin, and Ohad.
O'Halloran, T. *See* Tidball, O'Halloran, and Burridge.
Oka, J. A., and Weigel, P. H. Binding and spreading of hepatocytes on synthetic galactose culture surfaces occur as distinct and separable threshold responses. 1055.
Okagaki, T., and Kamiya, R. Microtubule sliding in mutant *Chlamydomonas* axonemes devoid of outer or inner dynein arms. 1895.
Olden, K. *See* Humphries, Akiyama, Komoriya, Olden, and Yamada.
Oliver, J. M. *See* Sager, Rothfield, Oliver, and Berlin.
Olson, E. N., Sternberg, E., Hu, J. S., Spizz, G., and Wilcox, C. Regulation of myogenic differentiation by type β transforming growth factor. 1799.
Omlin, F. X. *See* Matthieu, Roch, Omlin, Rambaldi, Almazan, and Braun.
Orci, L., Ravazzola, M., Amherdt, M., Madsen, O., Perrelet, A., Vassalli, J.-D., and Anderson, R. G. W. Conversion of proinsulin to insulin occurs coordinately with acidification of maturing secretory vesicles. 2273.
— *See* Iacopetta, Carpentier, Pozzan, Lew, Gorden, and Orci.
— *See* Meda, Bruzzone, Knodel, and Orci.
Ortiz, I. *See* Epstein, Ortiz, and Mackinnon.
Owen, L. *See* Siminoski, Gonnella, Bernanke, Owen, Neutra, and Murphy.
Owen, N. E. Effect of catecholamines on Na/H exchange in vascular smooth muscle cells. 2053.
Owens, G. C. *See* Murray, Owens, Prediger, Crossin, Cunningham, and Edelman.

P

Pagano, R. E. *See* Uster and Pagano.
Pagh, K., and Gerisch, G. Monoclonal antibodies binding to the tail of *Dictyostelium discoideum* myosin: their effects on antiparallel and parallel assembly and actin-activated ATPase activity. 1527.
Palleroni, A. V. *See* Yaar, Palleroni, and Gilchrest.
Panfili, E. *See* de Bernard, Bianco, Bonucci, Costantini, Lunazzi, Martinuzzi, Modricky, Moro, Panfili, Pollesello, Stagni, and Vittur.
Patterson, P. H. *See* Chiu, Matthew, and Patterson.
Paul, A.-L. *See* Herrin, Michaels, and Paul.
Paul, D. L. Molecular cloning of cDNA for rat liver gap junction protein. 123.
Pazirandeh, M. *See* Keller, Pazirandeh, and Krisans.
Pearse, B. M. F. *See* Sorger, Crowther, Finch, and Pearse.
Perillo, N. *See* Snell, Kosfiszer, Clausell, Perillo, Imam, and Hunnicutt.
Perrelet, A. *See* Orci, Ravazzola, Amherdt, Madsen, Perrelet, Vassalli, and Anderson.
Perry, E. W. *See* Abrahamson and Perry.
Pfeffer, S. R., Huima, T., and Redman, C. M. Biosynthesis of spectrin and its assembly into the cytoskeletal system of Friend erythroleukemia cells. 103.
Pfenninger, K. H. *See* Greenberger and Pfenninger.
Pincon-Raymond, M. *See* Rieger, Daniloff, Pincon-Raymond, Crossin, Grumet, and Edelman.
Piperno, G. *See* LeDizet and Piperno.
Plattner, H. *See* Vilmart-Seuwen, Kersken, Stürzl, and Plattner.
Plescia, J. *See* Plow, Freaney, Plescia, and Miles.
Plow, E. F., Freaney, D. E., Plescia, J., and Miles, L. A. The plasminogen system and cell surfaces: evidence for plasminogen and urokinase receptors on the same cell type. 2411.
Plumley, F. G. *See* Jensen, Herrin, Plumley, and Schmidt.
Pohlhammer, K. *See* Flucher, Lenglachner-Bachinger, Pohlhammer, Adam, and Mollay.
Poliard, A. M., Bernuau, D., Tournier, I., Legrès, L. G., Schoevaert, D., Feldmann, G., and Sala-Trepat, J. M. Cellular analysis by in situ hybridization and immunoperoxidase of alpha-fetoprotein and albumin gene expression in rat liver during the perinatal period. 777.
Pollard, T. D. Rate constants for the reactions of ATP- and ADP-actin with the ends of actin filaments. 2747.
— *See* Hagen, Kiehart, Kaiser, and Pollard.
Pollesello, P. *See* de Bernard, Bianco, Bonucci, Costantini, Lunazzi, Martinuzzi, Modricky, Moro, Panfili, Pollesello, Stagni, and Vittur.
Porter, K. R. *See* McNiven and Porter.
Porter, S. *See* Ratner, Elbein, Bunge, Porter, Bunge, and Glaser.
Pozzan, T. *See* Iacopetta, Carpentier, Pozzan, Lew, Gorden, and Orci.
Pratt, L. H. *See* McCurdy and Pratt.
Pratt, M. M. Stable complexes of axoplasmic vesicles and microtubules: protein composition and ATPase activity. 957.
Prediger, E. A. *See* Murray, Owens, Prediger, Crossin, Cunningham, and Edelman.
Press, W. *See* Bruns, Press, Engvall, Timpl, and Gross.
Primakoff, P. *See* Cowan, Primakoff, and Myles.
Prywes, R. *See* Livneh, Benveniste, Prywes, Felder, Kam, and Schlessinger.
Pumplin, D. W. *See* Baetscher, Pumplin, and Bloch.

R

Rambaldi, I. *See* Matthieu, Roch, Omlin, Rambaldi, Almazan, and Braun.

Rapraeger, A., Jalkanen, M., and Bernfield, M. Cell surface proteoglycan associates with the cytoskeleton at the basolateral cell surface of mouse mammary epithelial cells. 2683.

Rath, V. L. *See* Tajima, Lauffer, Rath, and Walter.

Ratner, N., Elbein, A., Bunge, M. B., Porter, S., Bunge, R. P., and Glaser, L. Specific asparagine-linked oligosaccharides are not required for certain neuron–neuron and neuron–Schwann cell interactions. 159.

Ravazzola, M. *See* Orci, Ravazzola, Amherdt, Madsen, Perrelet, Vassalli, and Anderson.

Rechsteiner, M. *See* Wu, Kuehl, and Rechsteiner.

Redman, C. M. *See* Pfeffer, Huima, and Redman.

Rehfeld, J. F. *See* Madsen, Larsson, Rehfeld, Schwartz, Lernmark, Labrecque, and Steiner.

Reichardt, L. F. *See* Tomaselli, Reichardt, and Bixby.

Rener, J. *See* Howard, Uni, Aikawa, Aley, Leech, Lew, Wellems, Rener, and Taylor.

Rentrop, M., Knapp, B., Winter, H., and Schweizer, J. Differential localization of distinct keratin mRNA-species in mouse tongue epithelium by in situ hybridization with specific cDNA probes. 2583.

Resendez, E., Jr., Ting, J., Kim, K. S., Wooden, S. K., and Lee, A. S. Calcium ionophore A23187 as a regulator of gene expression in mammalian cells. 2145.

Rieder, C. L., Davison, E. A., Jensen, L. C. W., Cassimeris, L., and Salmon, E. D. Oscillatory movements of monooriented chromosomes and their position relative to the spindle pole result from the ejection properties of the aster and half-spindle. 581.

— *See* Sluder, Miller, and Rieder.

Rieger, F., Daniloff, J. K., Pincon-Raymond, M., Crossin, K. L., Grumet, M., and Edelman, G. M. Neuronal cell adhesion molecules and cytoactin are colocalized at the node of Ranvier. 379.

— *See* Daniloff, Levi, Grumet, Rieger, and Edelman.

Rink, T. J. *See* Conrad and Rink.

Risau, W., and Ekblom, P. Production of a heparin-binding angiogenesis factor by the embryonic kidney. 1101.

Risinger, M. A. *See* Wilkins, Risinger, and Lin.

Robbins, A. R. *See* Roff, Fuchs, Mellman, and Robbins.

Roberts, C. S. *See* von Grafenstein, Roberts, and Baker.

Roberts, M. P. *See* Miskimins, McClelland, Roberts, and Ruddle.

Roch, J.-M. *See* Matthieu, Roch, Omlin, Rambaldi, Almazan, and Braun.

Roff, C. F., Fuchs, R., Mellman, I., and Robbins, A. R. Chinese hamster ovary cell mutants with temperature-sensitive defects in endocytosis. I. Loss of function on shifting to the nonpermissive temperature. 2283.

Rogers, O. C. *See* Snider and Rogers.

Roman, L. M., and Garoff, H. Alteration of the cytoplasmic domain of the membrane-spanning glycoprotein p62 of Semliki Forest virus does not affect its polar distribution in established lines of Madin–Darby canine kidney cells. 2607.

Rome, L. H. *See* Kedersha and Rome.

— *See* Kedersha, Hill, Kronquist, and Rome.

Ropraz, P. *See* Skalli, Ropraz, Trzeciak, Benzonana, Gillessen, and Gabbiani.

Rosellini, C. *See* Castellani, Siri, Rosellini, Infusini, Borsi, and Zardi.

Rosenbaum, J. L. *See* Maruta, Greer, and Rosenbaum.

— *See* Williams, Mitchell, and Rosenbaum.

Rosoff, P. M., and Terres, G. Cyclosporine A inhibits Ca^{2+}-dependent stimulation of the Na^+/H^+ antiport in human T cells. 457.

Ross, R. R. *See* Harlan, Thompson, Ross, and Bowen-Pope.

Ross, R. *See* Gajdusek, Carbon, Ross, Nawroth, and Stern.

Rothfield, N. L. *See* Sager, Rothfield, Oliver, and Berlin.

Rotrosen, D., and Gallin, J. I. Histamine type I receptor occupancy increases endothelial cytosolic calcium, reduces F-actin, and promotes albumin diffusion across cultured endothelial monolayers. 2379.

Rougon, G., Dubois, C., Buckley, N., Magnani, J. L., and Zollinger, W. A monoclonal antibody against meningococcus group B polysaccharides distinguishes embryonic from adult N-CAM. 2429.

Roy, H. *See* Cannon, Wang, and Roy.

Rozdzial, M. M., and Haimo, L. T. Reactivated melanophore motility: differential regulation and nucleotide requirements of bidirectional pigment granule transport. 2755.

Ruddle, F. H. *See* Miskimins, McClelland, Roberts, and Ruddle.

Ruderman, J. V. *See* Standart, Hunt, and Ruderman.

Rukenstein, A. *See* Greene, Drexler, Connolly, Rukenstein, and Green.

Ruoslahti, E. *See* Engvall, Davis, Dickerson, Ruoslahti, Varon, and Manthorpe.

Rutishauser, U. *See* Frelinger and Rutishauser.

— *See* Watanabe, Frelinger, and Rutishauser.

Saadat, S., and Thoenen, H. Selective induction of tyrosine hydroxylase by cell–cell contact in bovine adrenal chromaffin cells is mimicked by plasma membranes. 1991.

S

Saga, S. *See* Nagata, Saga, and Yamada.

Sager, P. R., Rothfield, N. L., Oliver, J. M., and Berlin, R. D. A novel mitotic spindle pole component that originates from the cytoplasm during prophase. 1863.

Saito, A. *See* Costello, Chadwick, Saito, Chu, Maurer, and Fleischer.

Sakai, H. *See* Murofushi, Kotani, Aizawa, Hisanaga, Hirokawa, and Sakai.

Sakai, L. Y., Keene, D. R., and Engvall, E. Fibrillin, a new 350-kD glycoprotein, is a component of extracellular microfibrils. 2499.

—, **Keene, D. R., Morris, N. P., and Burgeson, R. E.** Type VII collagen is a major structural component of anchoring fibrils. 1577.

Saksela, O. *See* Laiho, Saksela, Andreasen, and Keski-Oja.

Saku, T. *See* Charonis, Tsilibary, Saku, and Furthmayr.

Sala-Trepat, J. M. *See* Poliard, Bernuau, Tournier, Legrès, Schoevaert, Feldmann, and Sala-Trepat.

Salmon, E. D. *See* Rieder, Davison, Jensen, Cassimeris, and Salmon.

Salpeter, M. M., Cooper, D. L., and Levitt-Gilmour, T. Degradation rates of acetylcholine receptors can be modified in the postjunctional plasma membrane of the vertebrate neuromuscular junction. 1399.

Sambrook, J. *See* Doyle, Sambrook, and Gething.

Sandoz, D. *See* Klotz, Bordes, Laine, Sandoz, and Bornens.

Sargent, T. D. *See* Miyatani, Winkles, Sargent, and Dawid.

Savagner, P., Imhof, B. A., Yamada, K. M., and Thiery, J.-P. Homing of hemopoietic precursor cells to the embryonic thymus: characterization of an invasive mechanism induced by chemotactic peptides. 2715.

Schachner, M. *See* Martini and Schachner.

Schermer, A., Galvin, S., and Sun, T.-T. Differentiation-related expression of a major 64K corneal keratin in vivo and in culture suggests limbal location of corneal epithelial stem cells. 49.

Schindler, M. *See* Ho, Malek-Hedayat, Wang, and Schindler.

Schleicher, M. *See* Witke, Schleicher, Lottspeich, and Noegel.

Schlesinger, M. J. Heat shock proteins: the search for functions. 321.

— *See* Collier and Schlesinger.

Schlessinger, J. Allosteric regulation of the epidermal growth factor receptor kinase. 2067.

— *See* Livneh, Benveniste, Prywes, Felder, Kam, and Schlessinger.

Schliwa, M. *See* Koonce and Schliwa.

Schmidt, G. W. *See* Jensen, Herrin, Plumley, and Schmidt.

Schoevaert, D. *See* Poliard, Bernuau, Tournier, Legrès, Schoevaert, Feldmann, and Sala-Trepat.

Schuster, G., Dewit, M., Staehelin, L. A., and Ohad, I. Transient inactivation of the thylakoid photosystem II light-harvesting protein kinase system and concomitant changes in intramembrane particle size during photoinhibition of *Chlamydomonas reinhardtii*. 71.

Schwartz, J. H. *See* Swanson, Elste, Greenberg, Schwartz, Aldrich, and Furth.

Schwartz, T. W. *See* Madsen, Larsson, Rehfeld, Schwartz, Lernmark, Labrecque, and Steiner.

Schweizer, J. *See* Rentrop, Knapp, Winter, and Schweizer.

Scott, B. K. *See* Wolf, Scott, and Millette.

Sen, S. *See* Teeter, Atsumi, Sen, and Kuo.
Sen-Majumdar, A. *See* Murthy, Basu, Sen-Majumdar, and Das.
Shaw, K. E. S. *See* Hardwick, Shaw, Wills, and Hunter.
Shea, E. *See* Buck, Shea, Duggan, and Horwitz.
Shevlin, P. *See* Hartwig and Shevlin.
Shields, D. *See* Eskridge and Shields.
Shooter, E. M. *See* Tiercy and Shooter.
Sibley, L. D., Krahenbuhl, J. L., Adams, G. M. W., and Weidner, E. *Toxoplasma* modifies macrophage phagosomes by secretion of a vesicular network rich in surface proteins. 867.
Siliciano, J. D. *See* Stevenson, Siliciano, Mooseker, and Goodenough.
Siminoski, K., Gonnella, P., Bernanke, J., Owen, L., Neutra, M., and Murphy, R. A. Uptake and transepithelial transport of nerve growth factor in suckling rat ileum. 1979.
Simons, K. *See* Fuller and Simons.
Singer, S. J. *See* Fujimoto and Singer.
Siri, A. *See* Castellani, Siri, Rosellini, Infusini, Borsi, and Zardi.
Skalli, O., Ropraz, P., Trzeciak, A., Benzonana, G., Gillessen, D., and Gabbiani, G. A monoclonal antibody against α-smooth muscle actin: a new probe for smooth muscle differentiation. 2787.
Sloboda, R. D. *See* Gilbert and Sloboda.
Sluder, G., Miller, F. J., and Rieder, C. L. The reproduction of centrosomes: nuclear versus cytoplasmic controls. 1873.
Smaill, B. H. *See* Jensen and Smaill.
Snell, W. J., Kosfiszer, M. G., Clausell, A., Perillo, N., Imam, S., and Hunnicutt, G. A monoclonal antibody that blocks adhesion of *Chlamydomonas* mt^+ gametes. 2449.
Snider, M. D., and Rogers, O. C. Membrane traffic in animal cells: cellular glycoproteins return to the site of Golgi mannosidase I. 265.
Somerville, S. C. *See* Darr, Somerville, and Arntzen.
Sorger, P. K., Crowther, R. A., Finch, J. T., and Pearse, B. M. F. Clathrin cubes: an extreme variant of the normal cage. 1213.
Soria, C. *See* Festoff, Hantaï, Soria, Thomaïdis, and Soria.
Soria, J. *See* Festoff, Hantaï, Soria, Thomaïdis, and Soria.
Spiess, J. *See* Noe, Andrews, Dixon, and Spiess.
Spizz, G. *See* Olson, Sternberg, Hu, Spizz, and Wilcox.
Spray, D. C., Ginzberg, R. D., Morales, E. A., Gatmaitan, Z., and Arias, I. M. Electrophysiological properties of gap junctions between dissociated pairs of rat hepatocytes. 135.
Staehelin, L. A. *See* Schuster, Dewit, Staehelin, and Ohad.
Stagni, N., *See* de Bernard, Bianco, Bonucci, Costantini, Lunazzi, Martinuzzi, Modricky, Moro, Panfili, Pollesello, Stagni, and Vittur.
Standart, N., Hunt, T., and Ruderman, J. V. Differential accumulation of ribonucleotide reductase subunits in clam oocytes: the large subunit is stored as a polypeptide, the small subunit as untranslated mRNA. 2129.
Steiner, D. F. *See* Madsen, Larsson, Rehfeld, Schwartz, Lernmark, Labrecque, and Steiner.
Stern, D. *See* Gajdusek, Carbon, Ross, Nawroth, and Stern.
Sternberg, E. *See* Olson, Sternberg, Hu, Spizz, and Wilcox.
Stevens, J. K. *See* Jacobs and Stevens.
Stevenson, B. R., Siliciano, J. D., Mooseker, M. S., and Goodenough, D. A. Identification of ZO-1: a high molecular weight polypeptide associated with the tight junction (zonula occludens) in a variety of epithelia. 755.
Stockdale, F. E. *See* Miller and Stockdale.
Strome, S. Fluorescence visualization of the distribution of microfilaments in gonads and early embryos of the nematode *Caenorhabditis elegans*. 2241.
Stukenbrok, H. *See* Navone, Jahn, Di Gioia, Stukenbrok, Greengard, and De Camilli.
Stürzl, R. *See* Vilmart-Seuwen, Kersken, Stürzl, and Plattner.
Suchard, S. J. *See* Bourguignon, Suchard, and Kalomiris.
Suhan, J. P. *See* Welch and Suhan.
Sun, T.-T. *See* Lynch, O'Guin, Hardy, Mak, and Sun.
— *See* Ma and Sun.
— *See* Schermer, Galvin, and Sun.
Suprynowicz, F. A., and Gerace, L. A fractionated cell-free system for analysis of prophase nuclear disassembly. 2073.
Suzuki, S. *See* Takeda, Iwata, Suzuki, Brown, and Kimata.
Swann, K., and Whitaker, M. The part played by inositol trisphosphate and calcium in the propagation of the fertilization wave in sea urchin eggs. 2333.
Swanson, M. E., Elste, A. M., Greenberg, S. M., Schwartz, J. H., Aldrich, T. H., and Furth, M. E. Abundant expression of *ras* proteins in *Aplysia* neurons. 485.
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Wang, D., Villasante, A., Lewis, S. A., and Cowan, N. J. The mammalian β-tubulin repertoire: hematopoietic expression of a novel, heterologous β-tubulin isotype. 1903.
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Wang, P. *See* Cannon, Wang, and Roy.
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